

**UNIVERSITY OF EDUCATION, WINNEBA-KUMASI
COLLEGE OF TECHNOLOGY EDUCATION-KUMASI
DEPARTMENT OF TECHNOLOGY EDUCATION**

COURSE OUTLINE

COURSE TITLE: TECHNOLOGY AND SOCIETY
COURSE CODE: DTE 247
CREDITS: 2 Hours
LEVEL: 200
SEMESTER: 4
LECTURER: STEPHEN K. AMOAKOHENE

COURSE DESCRIPTION

The course is intended to equip students with knowledge and skills in the application of air as a source of power for doing work as well as solving problems within society.

AREAS OF COVERAGE

- Unit 1 Fundamental of Pneumatics**
- Unit 2 Pneumatic Cylinder**
- Single Acting Cylinder (SAC)
 - Double Acting Cylinder (DAC)
 - Force produce by pneumatic Cylinder
- Unit 3 Valves**
- 3-port valves
 - 5-port valves
 - Shuttle valves
- Unit 4 Control of cylinders using**
3 - Port and 5 - port shuttle valves
- Unit 5 Speed control of pneumatic cylinders**
- Flow regulators
- Unit 6 Control circuits**
- Semi-automatic control of DAC
 - Automatic control of DAC

METHODOLOGY

The mode of delivery will include lectures, investigation, experimentation and designing and making pneumatic artifacts.

ASSESSMENT

The assessment for this course is in two parts

Continuous assessment: - Class exercises, quizzes assignments and project work - 40%

End of semester Examination A2-- hour paper will be set as an end of semester examination - 60%.

REFERENCES

Amoakohene S.K. et al (1998) Technical Skills and Drawing for Teacher Training Book one. Unimax Publishers Ltd Accra.

Garrett J. (1996) Design and Technology Second Edition, University of Cambridge. (Cambridge).

World Book (2001) The world Book Encyclopaedia Vol. 2 and 15
World Book Chicago